COMMERCIAL THERMOSTAT SUBMITTAL DATA

ENGLISH LANGUAGE/I-P UNITS

Rev.: 28 February, 2013

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CLIMATEMASTER®
Water-Source Heat Pump Systems

SUBMITTAL DATA

Unit Designation: _____

Job Name: _____

Architect: _____

Engineer: _____

Contractor: _____

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*Document page number is shown next to part number (e.g. LC204 - 3 = page 3). Since not all pages are typically used in the submittals process, the page number in the lower right corner can still be used (page ____of_____).

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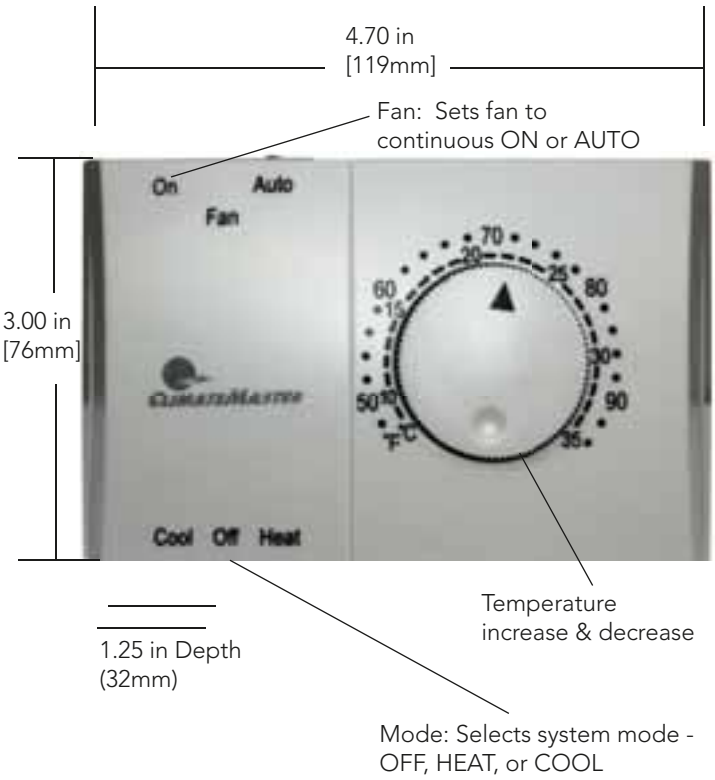
ATM11C11



One Heat / One Cool
Manual Changeover
Non-Programmable

Application:

The ATM11C11 thermostat provides single-stage, non-programmable temperature control for 24V water-source heat pump systems.

Features:

- Color: White
- Integral switches control system and fan mode.
- Vented cover for improved temperature sensing.
- Mount directly on wall or horizontal outlet box using mounting plate.
- Electronic sensing (no mercury bulb or bi-metal switching).

Specifications:

Electrical Rating:
- Voltage 20 to 30 VAC
- Heating: 0.18 to 1.0A at 30VAC maximum.
- Cooling: 1.5A running, 7.5A inrush at 25 VAC.

Temperature Settings:

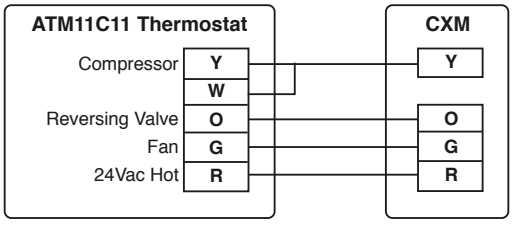
- Scale Range: 50°F to 90°F (10°C to 32°C).

Switching Action:

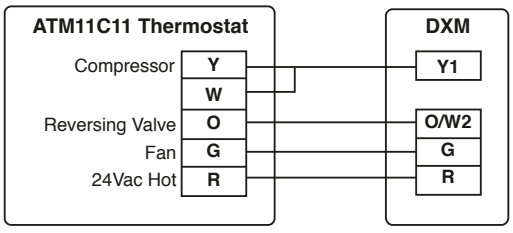
- Accurate electronic sensing/switching.
- 4-wire control of heating/cooling/reversing valve.

Wiring:

Connection to CXM Control



Connection to DXM Control



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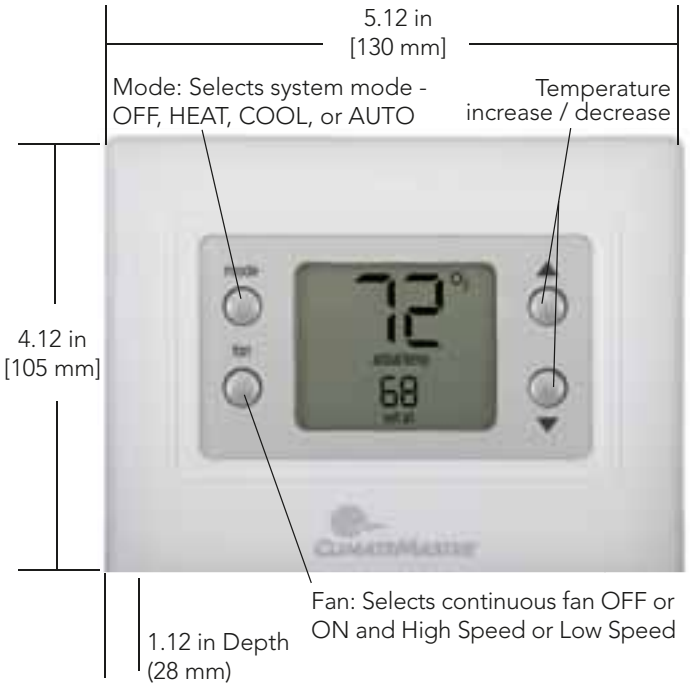
Thermostat Submittal Data ENG/I-P

ATA11U03


5.12 in
[130 mm]
Mode: Selects system mode - OFF, HEAT, COOL, or AUTO
Temperature increase / decrease
4.12 in
[105 mm]
Fan: Selects continuous fan OFF or ON and High Speed or Low Speed
1.12 in Depth
(28 mm)

One Heat / One Cool
Auto / Manual Changeover
Non-Programmable

Features (cont.):

- Installer setup options allow for customized applications, including dead band adjustment, temperature display offset, manual heat-cool only, keypad lockout, sensing on board or remote, maximum cycles per hour, fan speeds (2 or 1), setting minimum cooling temperature, and setting maximum heating temperature.
- Zero temperature droop performance.
- Setpoints are permanently held in memory (no batteries used) and retained during power outages.
- Backplate wiring for easy installation.

Specifications:

Electrical Rating:

- Input Power: 18 to 30 Vac, 50/60 Hz.

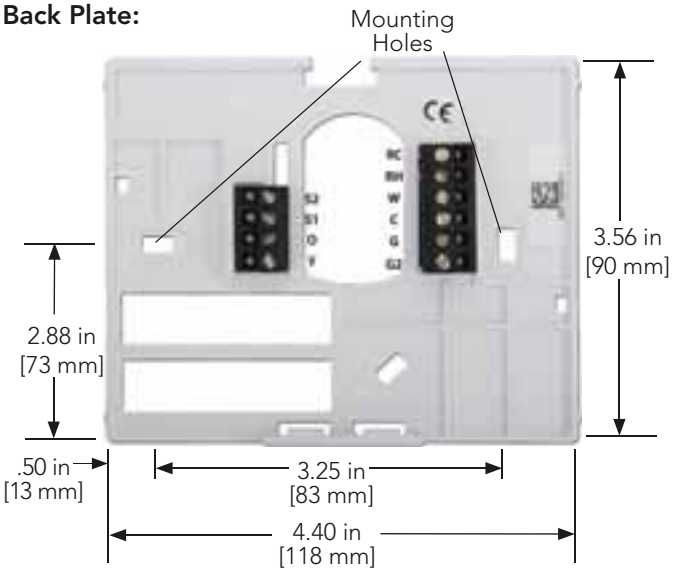
Temperature Settings:

- Setpoint Range: 50°F to 90°F [10°C to 32°C].
- The default setpoint for heating is 68°F [20°C] and for cooling is 78°F [25.5°C]. Press the ▲ or ▼ keys to change the setting. To change between heat, cool, and auto settings, press the mode key until the desired setting appears.

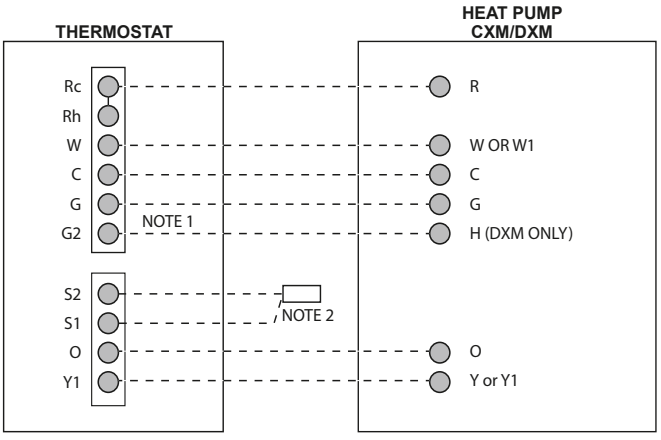
Output Ratings:

- Maximum current for each output is 1 Amp, 3 Amp total.

Back Plate:



Wiring:



Application:

The ATA11U03 electronic thermostat provides single-stage, 2 fan speed selections, non-programmable temperature control for 24 Vac water-source heat pump systems.

Features:

- Heat-Off-Cool-Auto System selections.
- Fan Low or High selections.
- Fan-On-Auto selections.
- °F or °C temperature display.
- Backlight user select.

1. For units using only 1 speed (see unit wire diagram.) Must add jumper on thermostat between G and G2, or configure thermostat for 1 speed (G only).
2. For optional remote sensor, configure thermostat remote sensing, use ASW06 (wall sensor) or 17B0008N05 (duct sensor).

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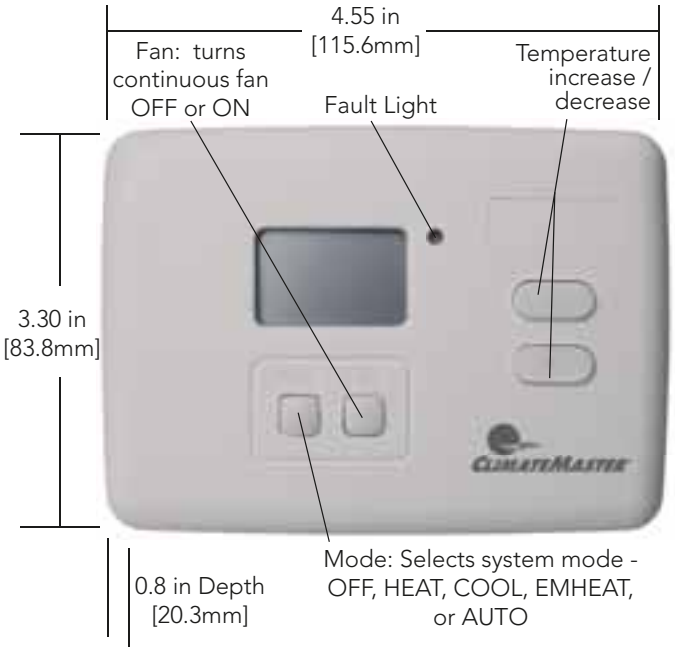
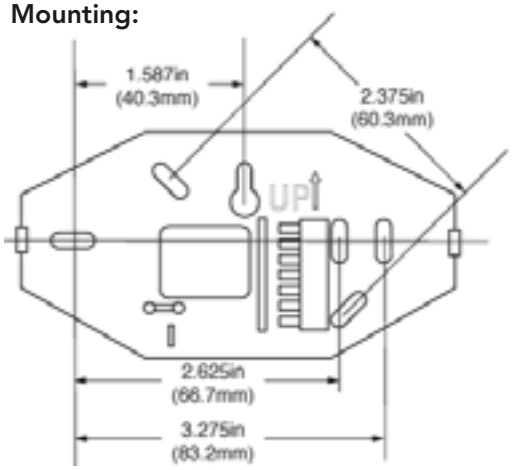


Mounting:



Application:

The ATA22U01 electronic thermostat provides two-stage, non-programmable temperature control for 24V water-source heat pump systems.

Features:

- Heat-Off-Cool-Em Heat-Auto System selections.
- Fan-On-Auto selections.
- °F or °C temperature display.
- Configurable automatic or manual changeover operation.
- Light emitting diode (LED) for alarm status.
- Installer setup options allow for customized applications.
- Zero temperature droop performance.
- Temperature display adjustment feature provides display offset for custom applications.
- Setpoints are permanently held in memory (no batteries used) and retained during power outages.

Two Heat / Two Cool
Manual / Auto Changeover
Non-Programmable

Features (cont.):

- Extended fan operation feature can be used to operate fan for 90 seconds after "Y" turns off.
- Setup feature allows either "current room temp" or the "current setpoint" to be displayed.
- Optional safety setpoints ensure that heating and cooling will occur even if thermostat is in "Off" mode.
- Backplate wiring for easy installation.
- Automatic fan staging (when used with DXM board and direct drive motor).

Specifications:

Electrical Rating:

- Input Power: 18 to 30 Vac, 50/60 Hz.

Temperature Settings:

- Setpoint Range: 50°F to 90°F [10°C to 32°C].
- The default setpoint for heating is 70°F [21°C] and for cooling is 74°F [23°C]. Press the▲ or ▼ keys to change the setting. To change between heat and cool settings, press the mode key until the setting to be changed appears.

Display Range:

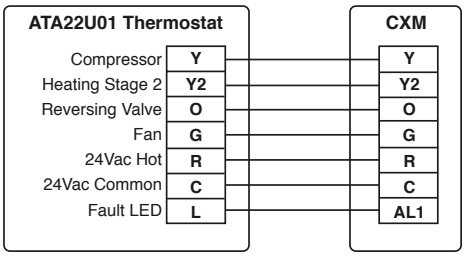
- Display Updates: Updated every 12 seconds.
- Differential (autochangeover model): 3°F [1.5°C] minimum.

Output Ratings:

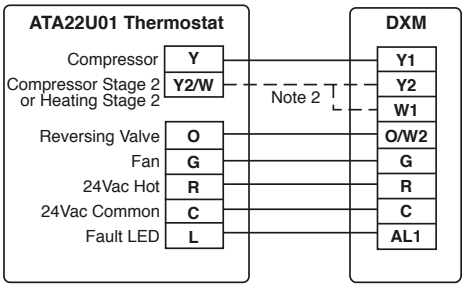
- Maximum current for each output is 1 Amp.

Wiring:

Connection to CXM Control



Connection to DXM Control



Note 2: Connect "W/Y2" thermostat output to "Y2" on the DXM if thermostat "Y2" option is configured as "Y2 - On" and the desired operation is for 2 stages of compressor with no electric heat. Connect "W/Y2" thermostat output to "W1" on the DXM if thermostat "Y2" option is configured as "Y2 - Off" and the desired operation is for 1 stage of compressor with electric heat for Heating Stage 2.

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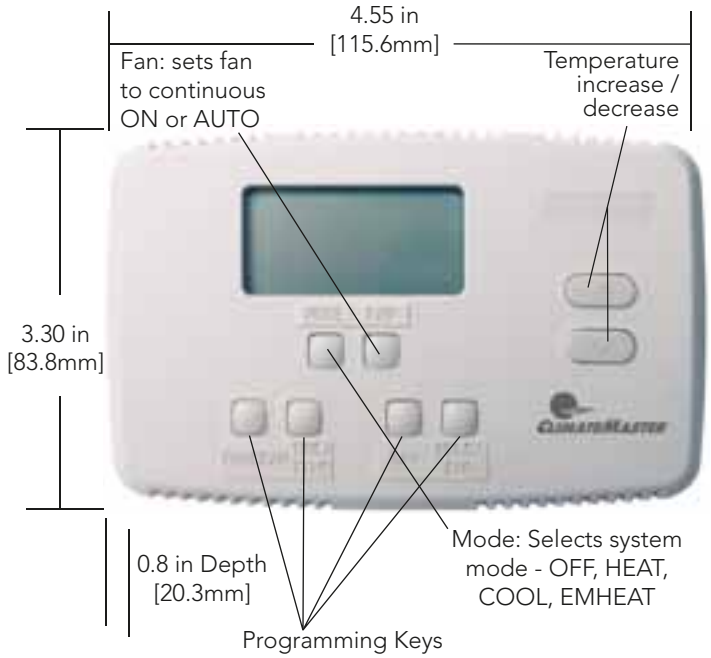
ATP21U01



Two Heat / One Cool
Manual Changeover
Programmable

Features (cont.):

- Zero temperature droop performance.
- Manual changeover.
- Convenient overrides allow temporary setpoint changes.
- Setpoints are permanently held in memory (no batteries used) and retained during power outages.
- Room temperature offset adjustment.
- Back-plate wiring connections for easy installation.

Specifications:

Electrical Rating:

- Input Power: 18 to 30 VAC, 50/60 Hz

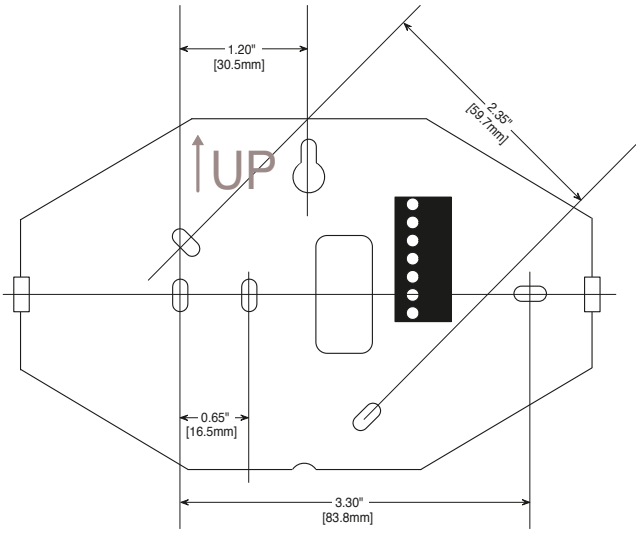
Temperature Settings:

- Setpoint range: 50°F to 90°F [10°C to 32°C]
- Press the ▲ or ▼ keys to change the temperature setting. The MODE, PROGRAM and HOLD keys allow changes to the program and schedule.

Output Ratings:

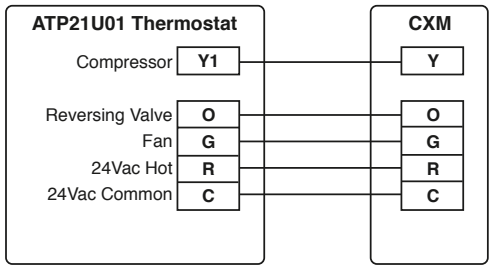
- Maximum current for each output is 1 Amp.

Mounting:

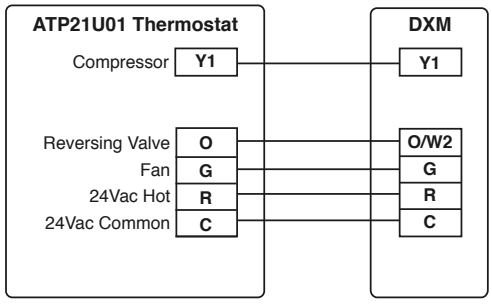


Wiring:

Connection to CXM Control



Connection to DXM Control



Application:

The ATP21U01 Thermostat provides 2 stages heating, 1 stage cooling, and programmable temperature control of 24V water-source heat pump equipment. Programming schedule includes one schedule for the five week days, one schedule for the two weekend days and four periods per day (5/2/4).

Features:

- 5-day/2-day programming.
- Four periods per day.
- °F or °C temperature display.
- Individual heat and cool setpoints.

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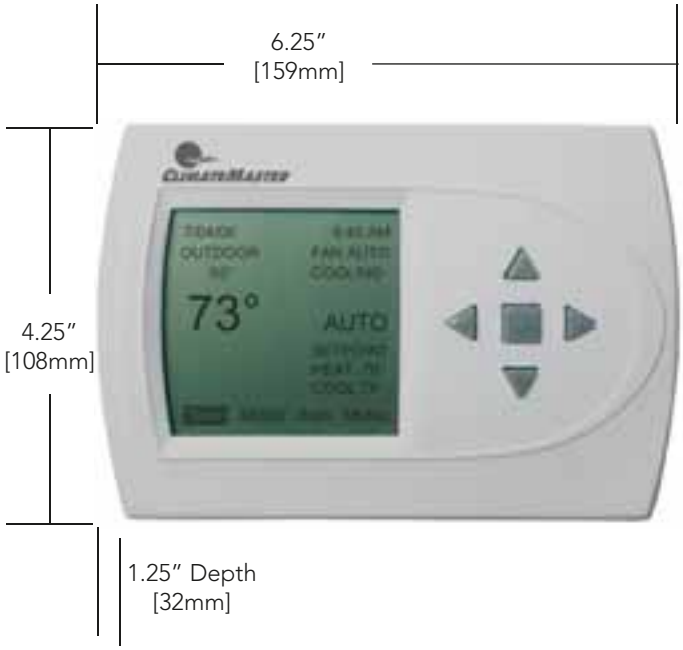
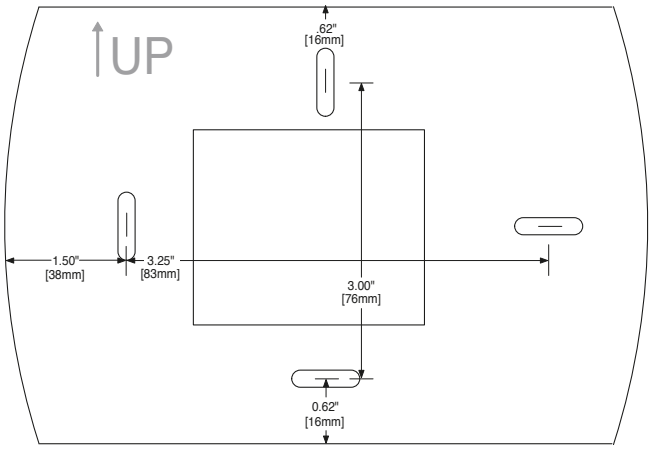
ATP32U03



Mounting:



Application:

The ATP32U03 Thermostat provides 3 stages heating, 2 stages of cooling, and programmable temperature control of 24V water-source heat pump equipment.

Features:

- 7-day programming.
- Four periods per day.
- °F or °C temperature display
- 12 or 24 hour clock.
- Individual heat and cool setpoints.
- Zero temperature droop performance.
- Automatic (program mode) or manual (HOLD) operation.
- Night Setback mode initiated by an external signal (when using a DXM controller).
- Convenient overrides allow temporary setpoint changes.

Three Heat / Two Cool
Manual / Auto Changeover
Programmable (7 Day)

Features (cont.):

- Setpoints are permanently held in memory (no batteries used) and retained during power outages.
- Room temperature offset adjustment.
- Progressive Recovery anticipates the time required to bring the space temperature to the next programmed event, and brings on the heat pump accordingly.
- Large backlit dot matrix display is activated whenever a key is pressed and remains on for 25 seconds.
- Menu-driven programming with five navigation buttons (UP/DOWN/LEFT/RIGHT/SELECT) for ease of use.
- Fault indication with red backlight display.
- Configurable service interval messages and servicing contractor contact information.
- Keypad lockout.
- Back-plate wiring connections for easy installation.
- Exclusive fault identification (When used with CXM or DXM) displays fault from CXM/DXM board (e.g. condensate overflow) and suggests possible causes.
- Compatible with optional AST008C sensor for use as remote and/or outdoor sensor, for indoor wall-mounted remote sensor use ASW06.
- Automatic fan staging (when used with DXM board and direct drive motor).

Specifications:

Electrical Rating:

- Input Power: 18 to 30 VAC, 50/60 Hz.

Operating Conditions:

- 32°F to 104°F [0°C to 40°C].
- 10% to 95% non-condensing.

Temperature Settings:

- Setpoint range: 55°F to 95°F [12°C to 35°C], +/- 2°F [1°C].

Output Ratings:

- Maximum current for each output is 1.0 Amp (2.0 max. output total).

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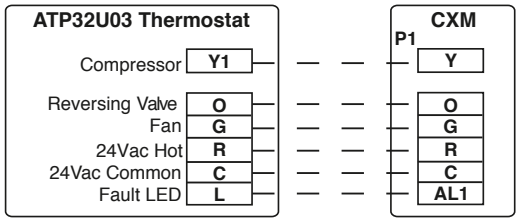
ATP32U03

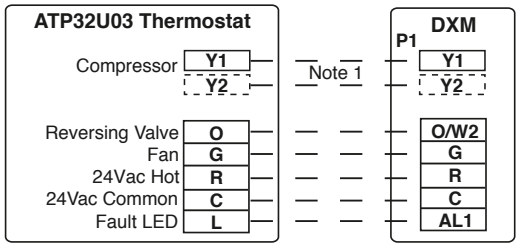
Wiring:

Single Stage Units

Connection to CXM Control

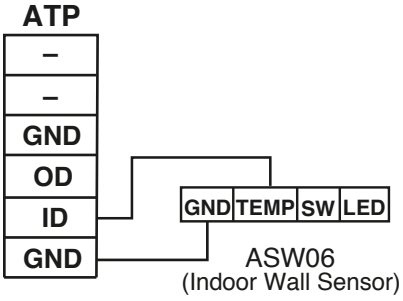


Connection to DXM Control

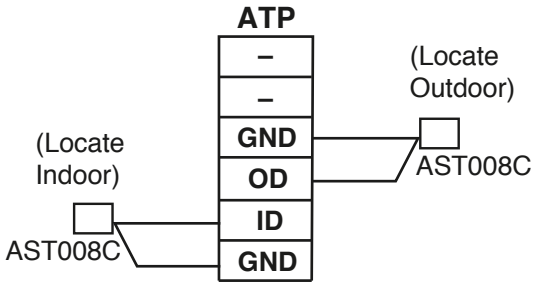


Single stage unit with PSC or belt drive fan motor
Note 1: Y2 may be used for High Speed fan for units with direct drive motor

Optional Wiring for AST06



Optional Wiring for AST008C

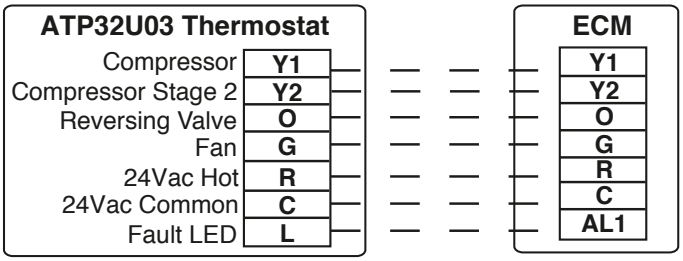


Note: AST or ASW can be mounted up to 200 feet from thermostat - use minimum two-conductor 22AWG thermostat wire. Follow all NEC and local electrical codes.

Three Heat / Two Cool
Manual / Auto Changeover
Programmable (7 Day)

Units With ECM Fan

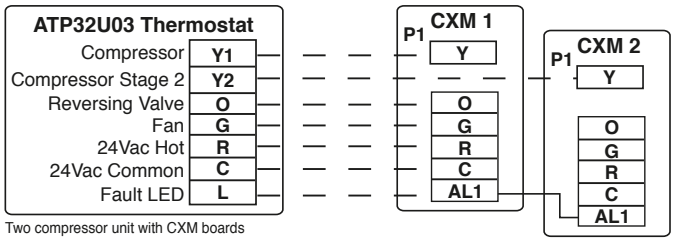
Connection to ECM Control



Units with CXM or DXM board and ECM fan motor

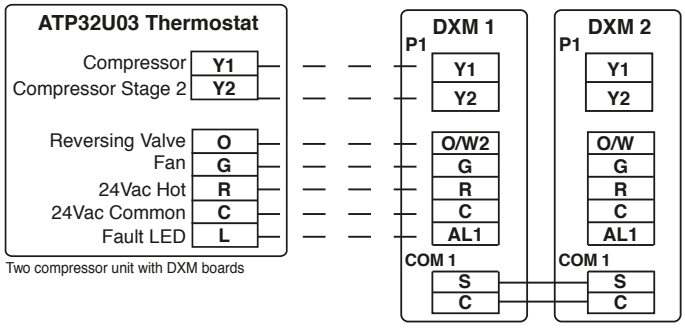
Two Stage Units

Connection to CXM Control



Two compressor unit with CXM boards

Connection to DXM Control



Two compressor unit with DXM boards

Field Wiring — — — — — — —

Factory Wiring ———————

See equipment wiring diagrams for more details.

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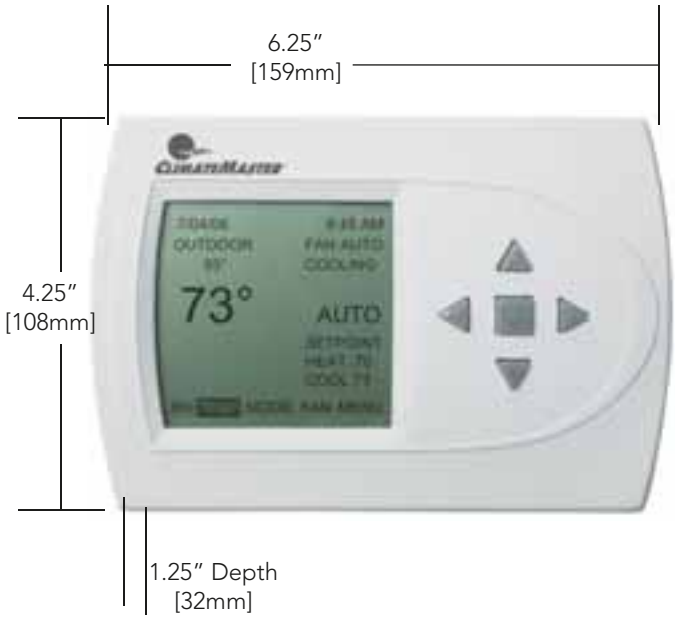
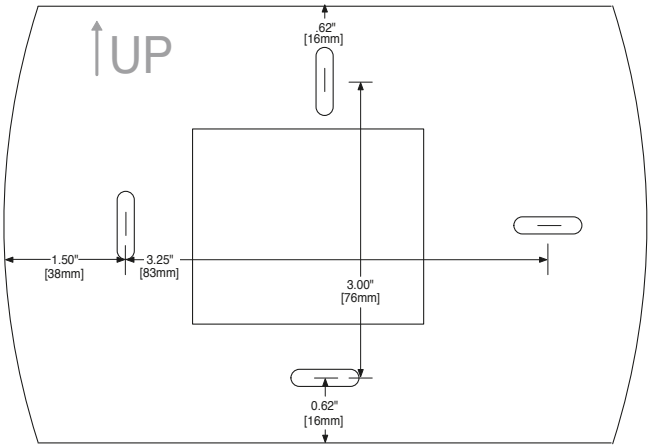
ATP32U04



Mounting:



Application:

The ATP32U04 Thermostat provides 3 stages heating, 2 stages of cooling, and programmable temperature/ humidity control of 24V water-source heat pump equipment.

Features:

- Dehumidification output is designed to work with Whole House Dehumidification Modulating Reheat option or with ECM fan motor dehumidification mode
- Integrated control of both temperature and relative humidity
- Integrated control eliminates separate thermostat and dehumidistat/humidistat
- Thermostat can be programmed to use humidification output to control a humidifier
- Night Setback mode initiated by an external signal (when using a DXM controller).

Three Heat / Two Cool,
Auto / Manual Changeover
Programmable (7 Day) - With Humidity Control

Features (cont.):

- Four periods per day
- °F or °C temperature display
- 12 or 24 hour clock
- Individual heat and cool setpoints
- Zero temperature droop performance
- Automatic (program mode) or manual (HOLD) operation
- 7-day programming.
- Convenient overrides allow temporary setpoint changes
- Setpoints are permanently held in memory (no batteries used) and retained during power outages
- Room temperature offset adjustment
- Progressive Recovery anticipates the time required to bring the space temperature to the next programmed event, and brings on the heat pump accordingly
- Large backlit dot matrix display is activated whenever a key is pressed and remains on for 25 seconds
- Menu-driven programming with five navigation buttons (UP/DOWN/LEFT/RIGHT/SELECT) for ease of use
- Fault indication with red backlight display
- Configurable service interval messages and servicing contractor contact information
- Keypad lockout
- Back-plate wiring connections for easy installation
- Exclusive fault identification (When used with CXM or DXM) displays fault from CXM/DXM board (e.g. condensate overflow) and suggests possible causes
- Compatible with optional AST008C sensor for use as remote and/or outdoor sensor, or for indoor wall mounted sensor use ASW06.

Specifications:

Electrical Rating:

- Input Power: 18 to 30 VAC, 50/60 Hz

Operating Conditions:

- 32°F to 104°F [0°C to 40°C]
- 10% to 95% non-condensing

Temperature Settings:

- Setpoint range: 55°F to 95°F [12°C to 35°C], +/- 2°F [1°C]
- Dehumidification setpoint range: 15% to 95% RH
- Humidification setpoint range: 10% to 45% RH

Output Ratings:

- Maximum current for each output is 1.0 Amp (2.0 max. output total).

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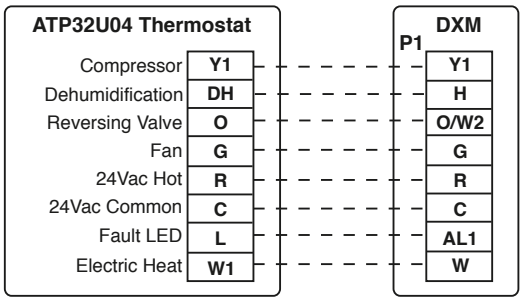
Thermostat Submittal Data ENG/I-P

ATP32U04

Wiring:

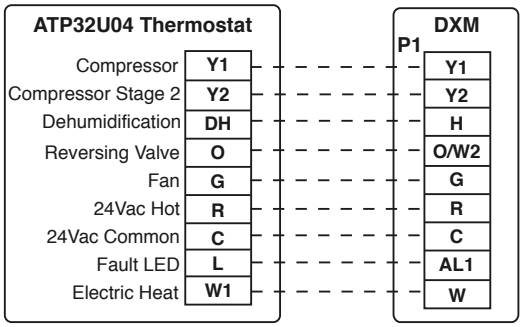
Units with ClimaDry Reheat

Connection to DXM Control (PSC Fan)



Single stage unit with ClimaDry Modulating Reheat Option and PSC fan

Connection to DXM Control

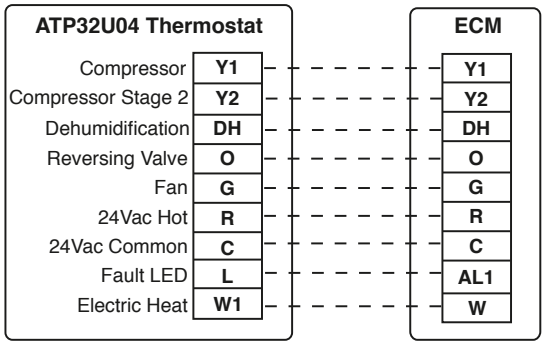


Two-stage unit with ClimaDry Modulating Reheat Option and DXM board

Three Heat / Two Cool
Auto / Manual Changeover
Programmable (7 Day)
With Humidity Control

Units with ECM Fan

Connection to ECM Control



Units with CXM or DXM board and ECM fan motor, utilizing ECM dehumidification mode (w/o ClimaDry option)

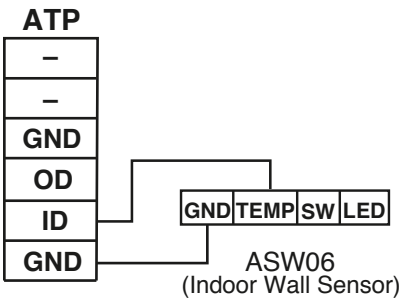
Notes:
1) ECM dehumidification mode slows down fan speed in the cooling mode when dehumidification output from thermostat is active. Normal heating and cooling fan speeds are not affected.
2) ECM board DIP switch SW9 must be in dehumid. mode.

Field Wiring – – – – – – – – –

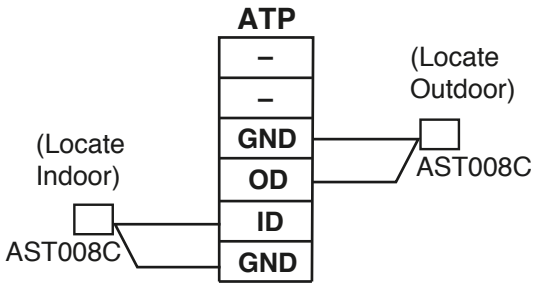
Factory Wiring ———————

See equipment wiring diagram for more details

Optional Wiring for AST06



Optional Wiring for AST008C



Note: AST or ASW can be mounted up to 200 feet from thermostat - use minimum two-conductor 22AWG thermostat wire. Follow all NEC and local electrical codes.

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AST008C

Remote/Outdoor Temperature Sensor

Application:

The AST008C sensor is a thermistor, used as an accessory for thermostat models ATP32U03C and ATP32U04C. This sensor provides outdoor air temperature information for the control system, as well as an indication of outdoor temperature on the display screen. The AST008C sensor can also be used as a remote indoor sensor. Two sensors may be used--one for remote indoor temperature sensing, and one for outdoor temperature sensing. When the sensor is used as a remote indoor temperature sensor, the internal sensor of the thermostat becomes inactive. (No thermostat reconfiguration required).

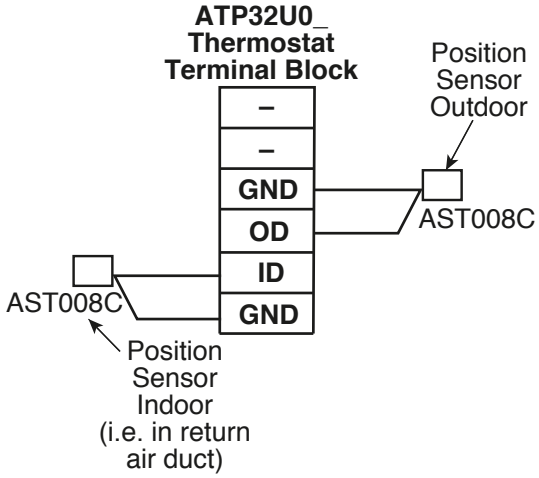
Features:

- Designed for indoor or outdoor installation.
- May be used as indoor remote temperature sensor or as outdoor temperature sensor.

Specifications:

- Two-wire connection to thermostat, extendable with two-conductor 22 AWG thermostat wire up to 200 feet.
- Mounting clip included

Wiring:



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Revision History

Date:	Item:	Action:
02/28/13	AST008C	Updated
02/25/13	ATA11U03	Added
11/26/12	ATA11C04 and AST009	Removed
02/16/12	ATA11C06	Removed
01/26/12	ATP32, ATP21, AST008C, AST009	Updated
04/26/11	ATP32U03 & ATP32U04 Featuresp	Updated
01/03/11	Format - All Pages	Updated
09/01/10	ATP32U03 & ATP32U04	Temperature Settings Updated
06/11/10	Format - All Pages	Updated
07/06/09	ATP11N01	Removed
05/21/09	ATM11C04	Removed
05/11/09	ATP32U04	Information and Pictorials Added to Page 12
05/11/09	ATR11C01, ATT11C01 Page	Removed
05/11/09	ATP31U02	Changed to ATP31U04
05/11/09	ATP31U01	Changed to ATP31U03
10/31/08	ATM11C04	Added
09/16/08	ATP32UO2	Updated Wiring Controls
07/31/08	ATR11C01, ATT11C01	Information Added
07/23/08	ATA11C03, ATA11C04	Note 3 Added
05/01/08	ATP11C	Updated Verbage and Changed Pictures
10/18/07	ATP32U01	Added 2 DXM wiring diagram
10/18/07	ATP21U01	Removed “Auto” mode notation
10/18/07	ATM11C11	Added model
03/31/06	AST008C	Added AST008C outdoor/remote sensor
02/23/06	First Published	

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